

Anti-Angiogenesis Screening: Target Angiogenic-Endothelial Cell Functions

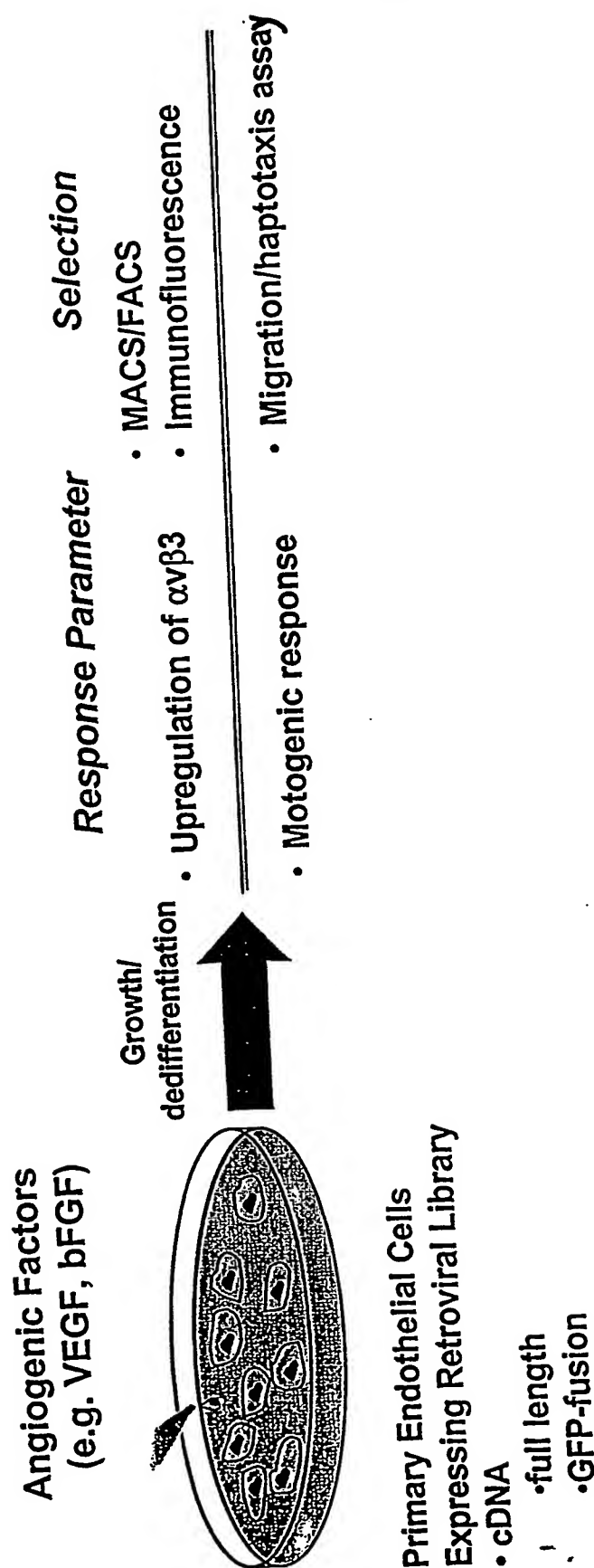
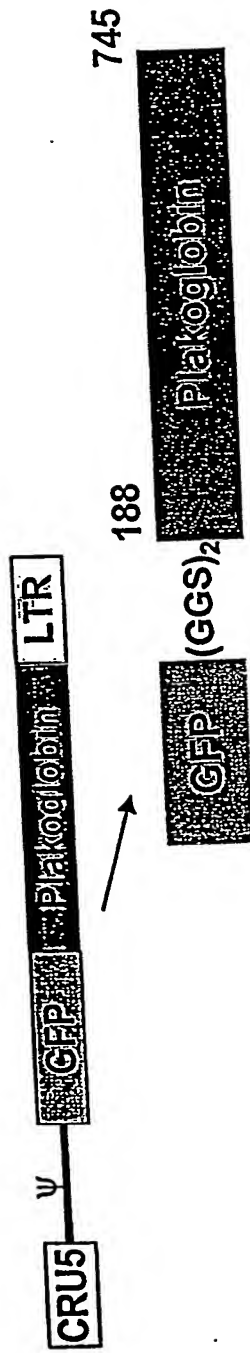


FIG. 1

BEST AVAILABLE COPY

Clone 19B5 Encodes a GFP-Plakoglobin Fusion Protein



— GFP-Plakoglobin
— GFP-vector

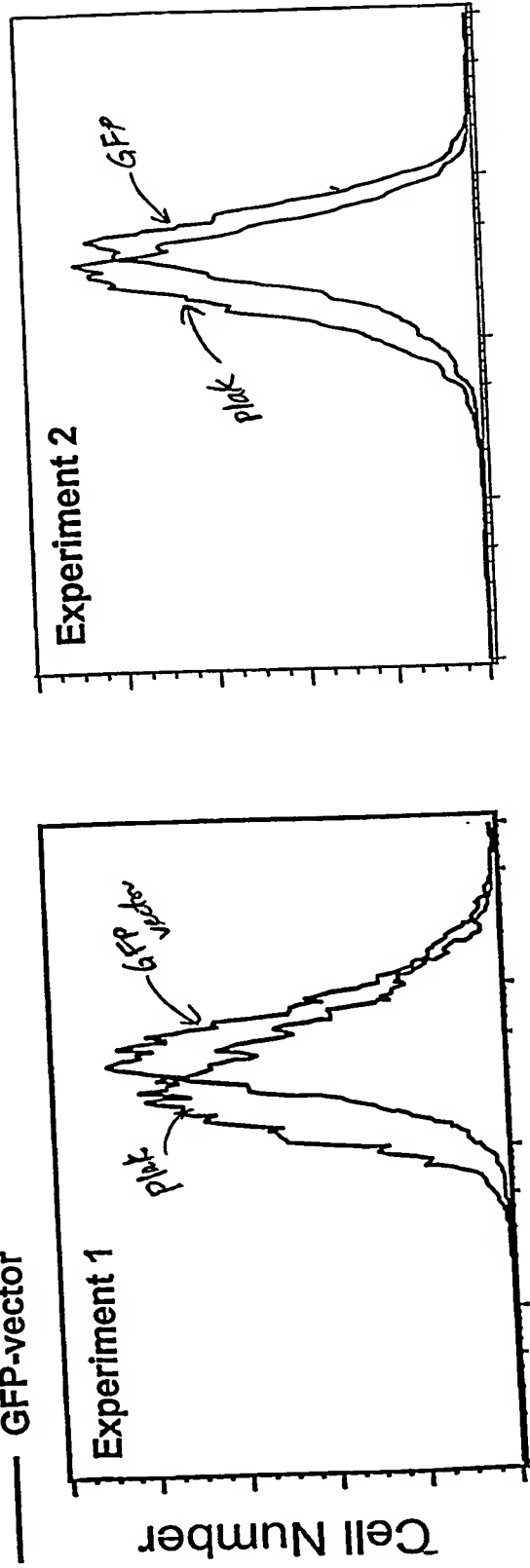


FIG. 2

GFP-ΔN-Plakoglobin Expression in Endothelial Cells Downregulates αvβ3 Surface Levels

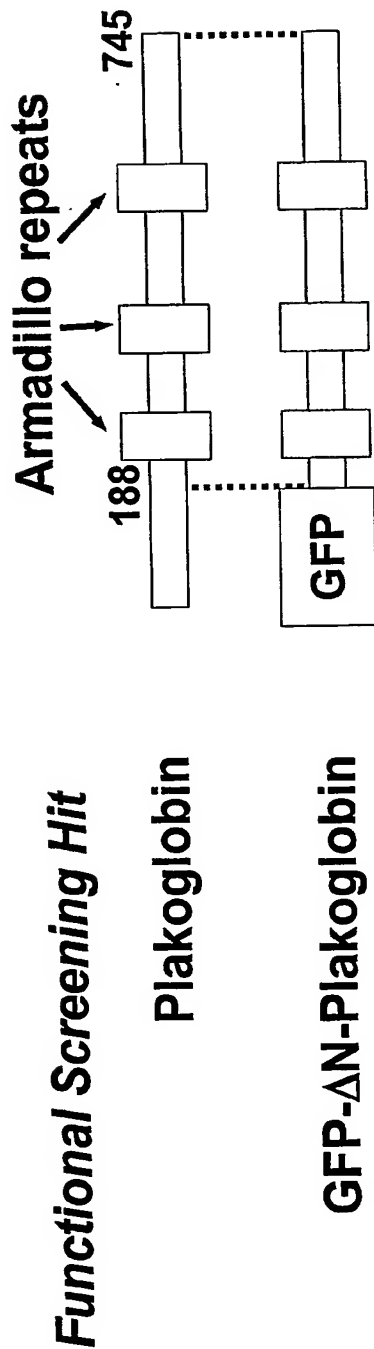


Figure 3

FACS Analysis

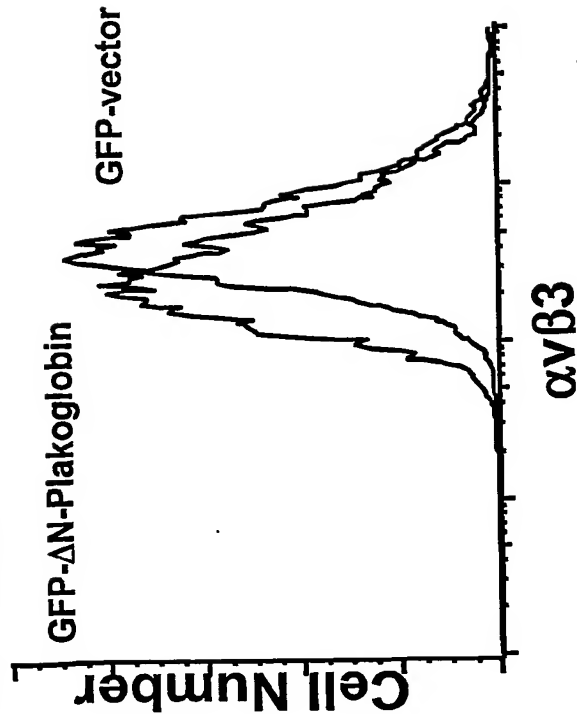


Figure 4

**GFP-ΔN-Plako Expression Downregulates Vitronectin Receptors
(αvβ3 and αvβ5) But Not the Fibronectin Receptor (α5β1)**

FACS Analysis

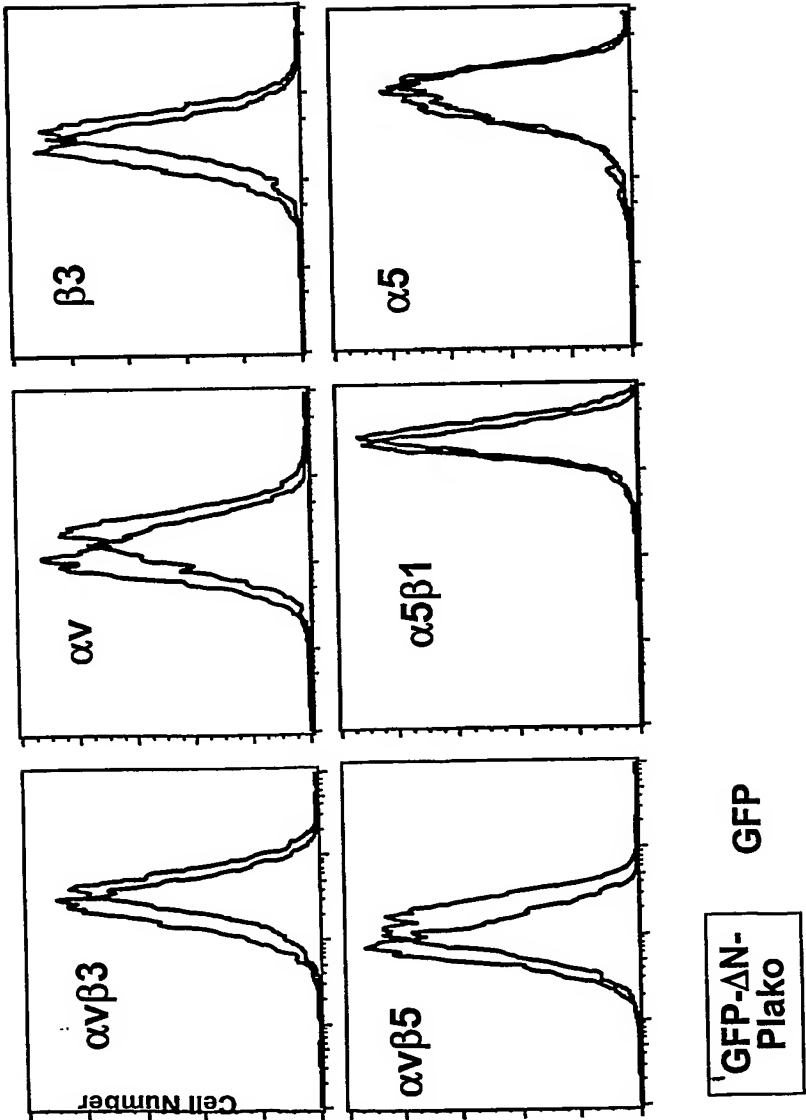
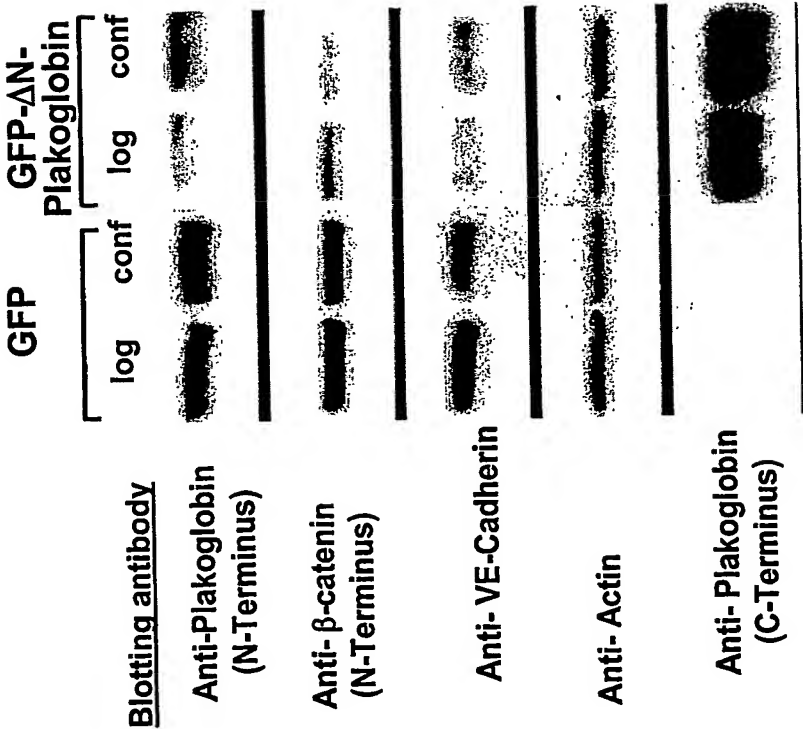


Figure 5

Expression of GFP-ΔN-Plakoglobin Downregulates Endogenous Catenin Levels

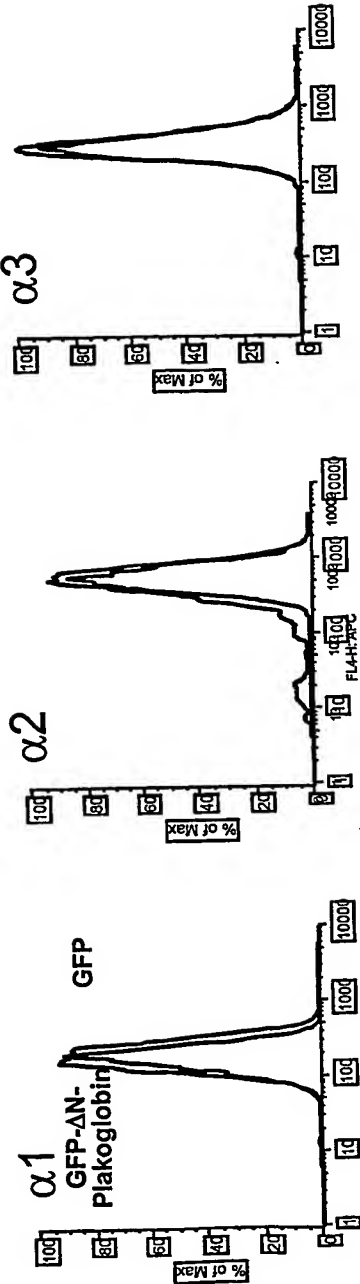
Western blot



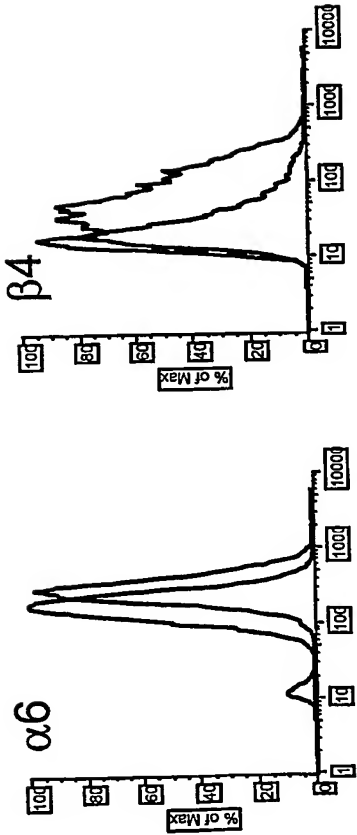
(Transduced HUVEC)

GFP-ΔN-Plakoglobin Expression Upregulates
Surface Levels of the Laminin Receptor, α6β4

Collagen



Laminin



Transduced HUVEC

Figure 6

αvβ3 Screen Clone Encodes an N-terminally Truncated Splice Variant of HoxB2

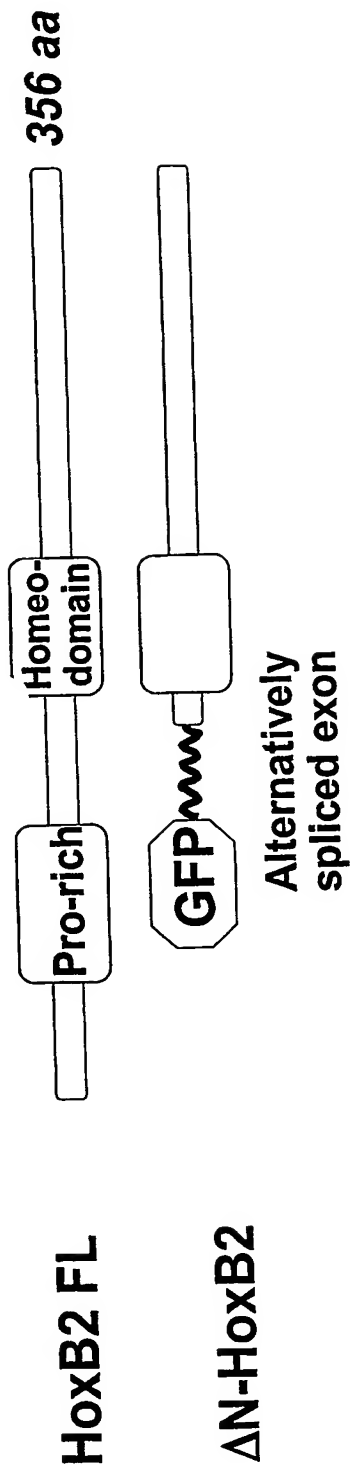
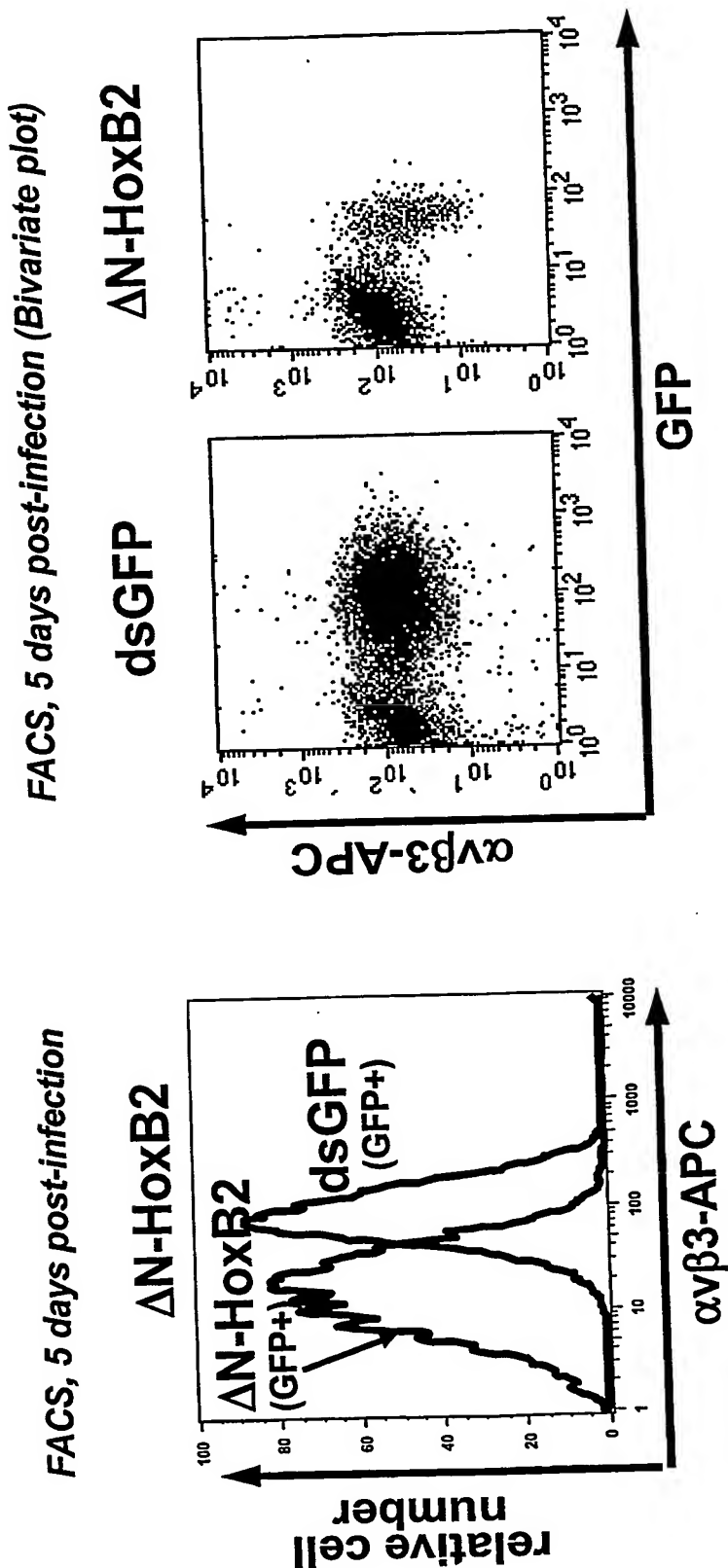


Figure 7



Δ N-HoxB2 Downregulates Both α v and β 3 Integrin Subunit Surface Expression

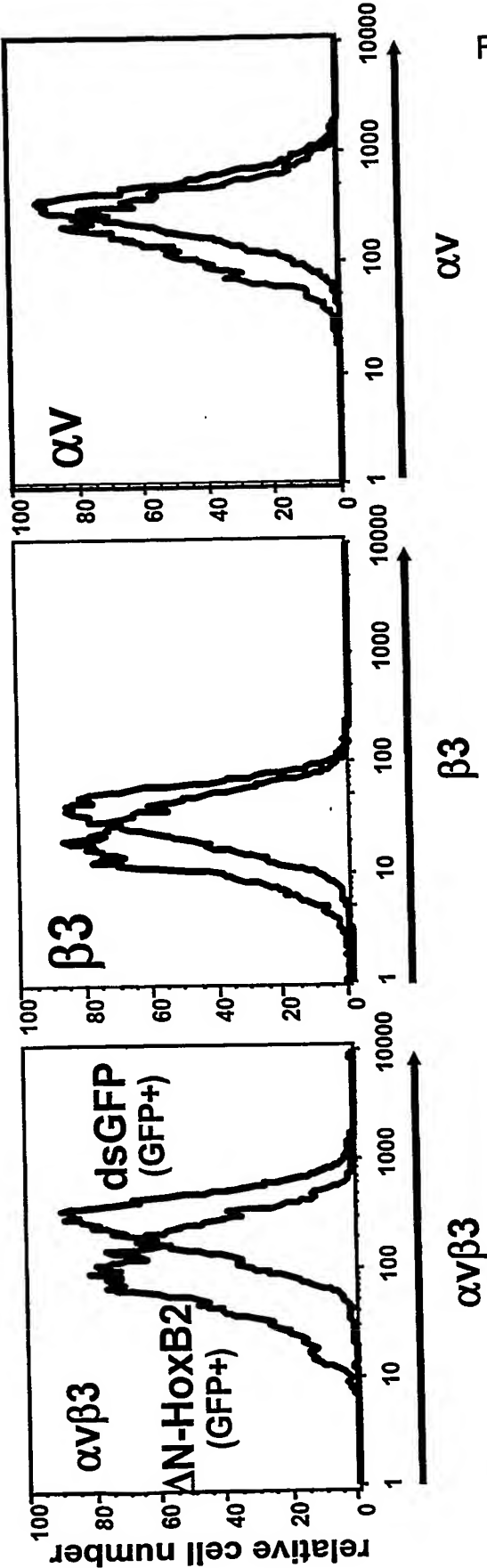
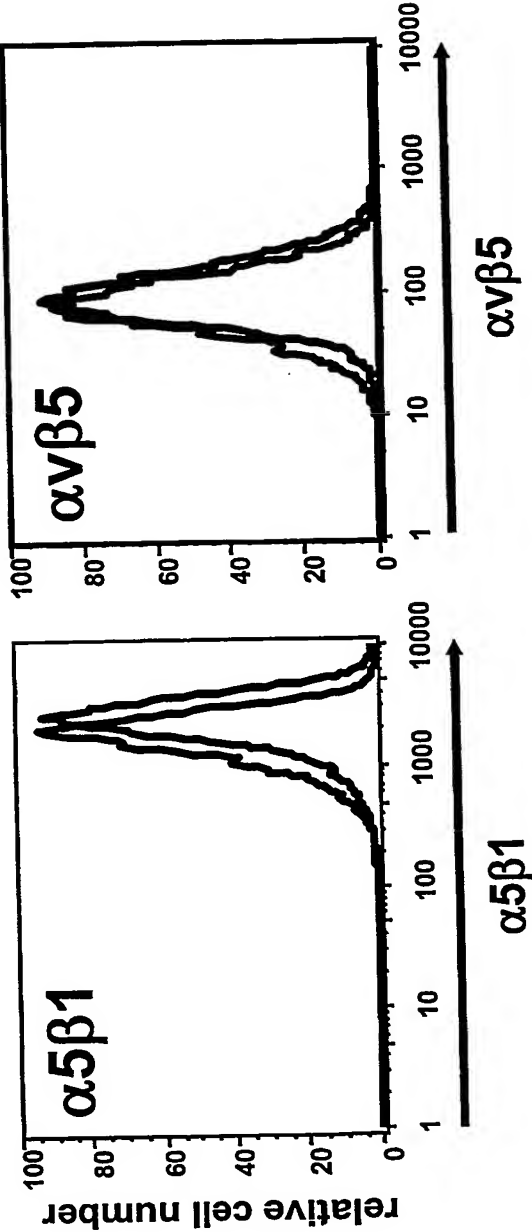
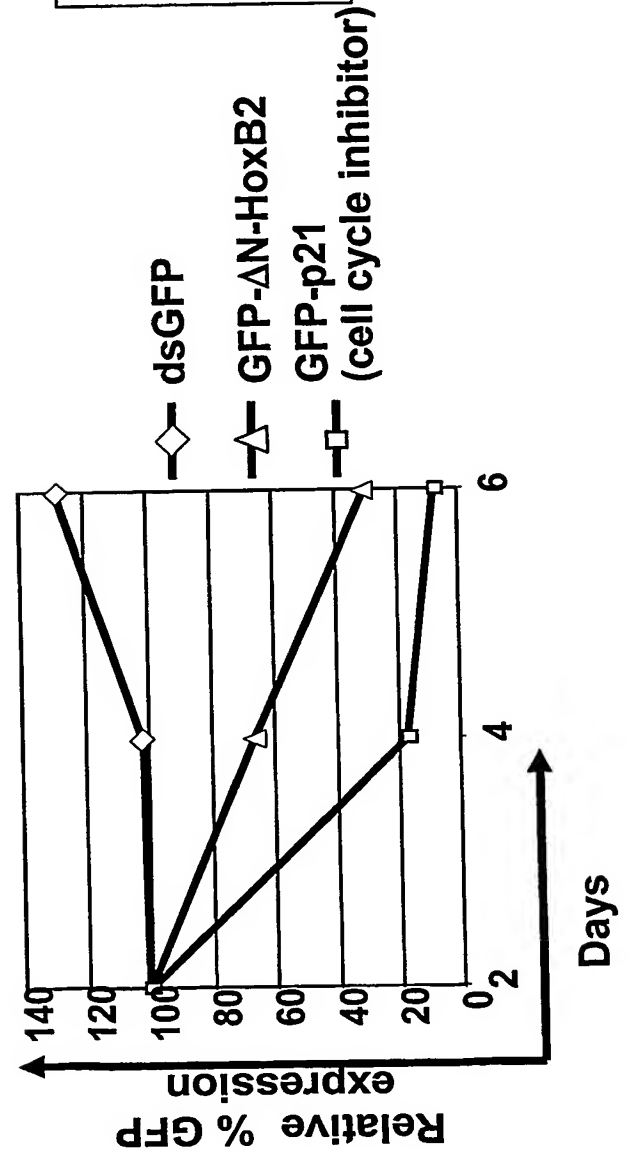
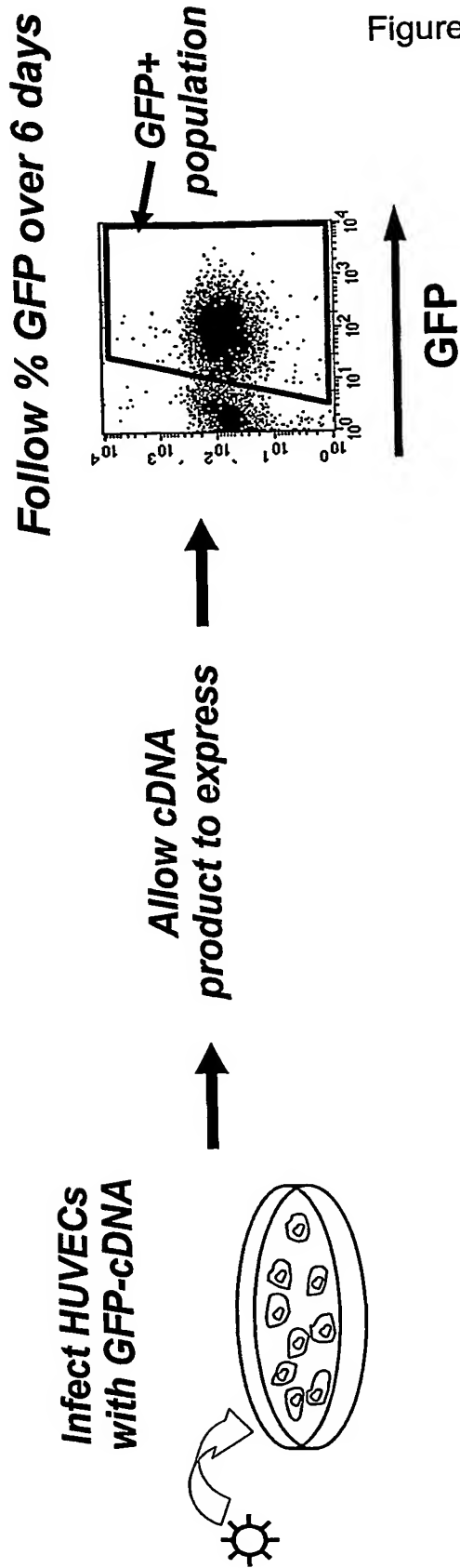


Figure 8

Δ N-HoxB2 also Downregulates α 5 β 1 Surface Expression



Δ N-HoxB2 Inhibits Proliferation in HUVECs



% GFP+ Δ N-HoxB2-expressing cells decreases over time compared to dsGFP vector, indicative of decreased proliferation (or increased apoptosis)

Full Length HoxB2 Phenocopies Δ N-HoxB2 in the Downregulation of α v β 3

FACS, 5 days post-infection

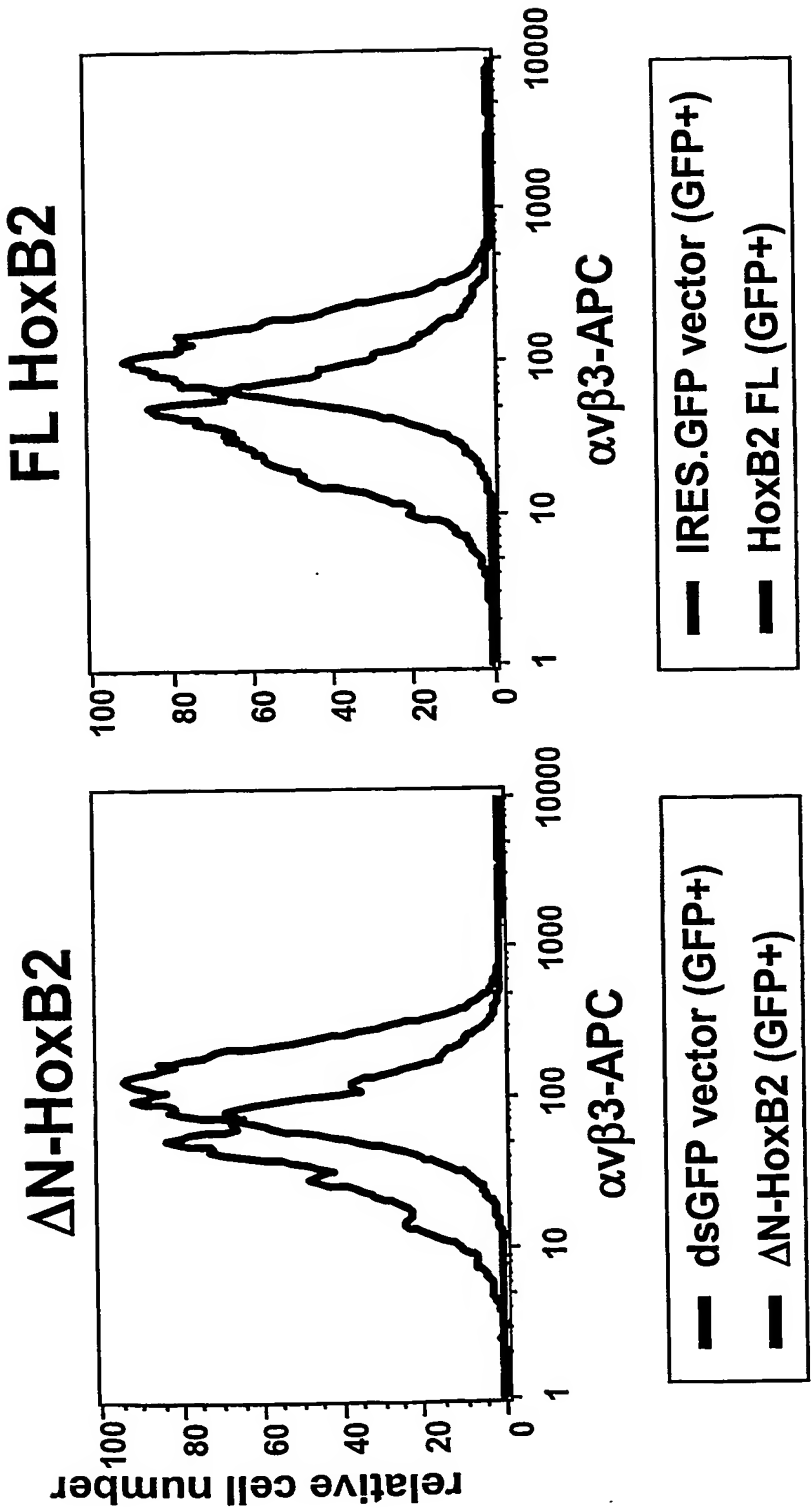


Figure 10

SUSP-1

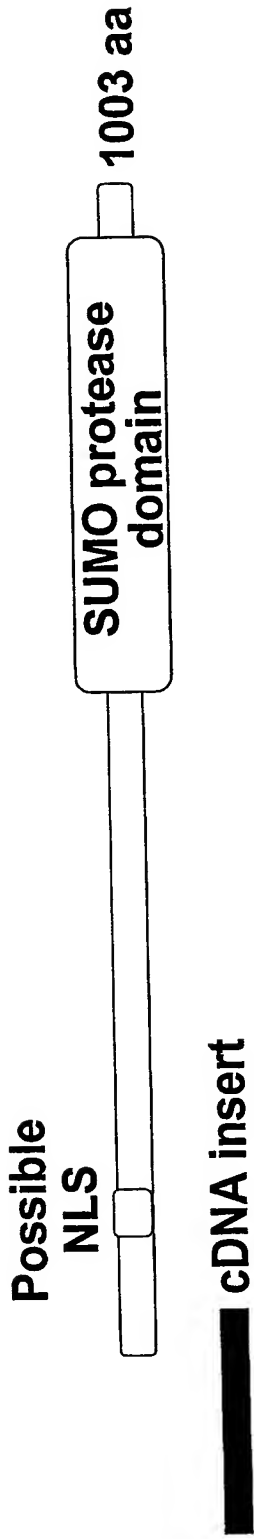
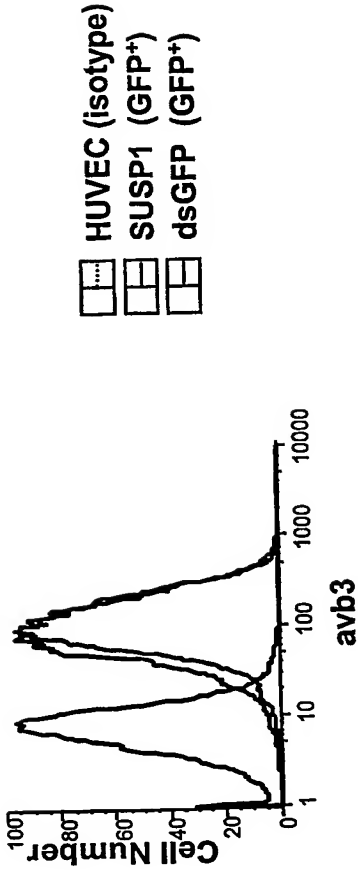


Figure 11



Sense orientation, N-terminal fusion

GFP-SUSP-1 Screening Hit Does Not Affect Proliferation

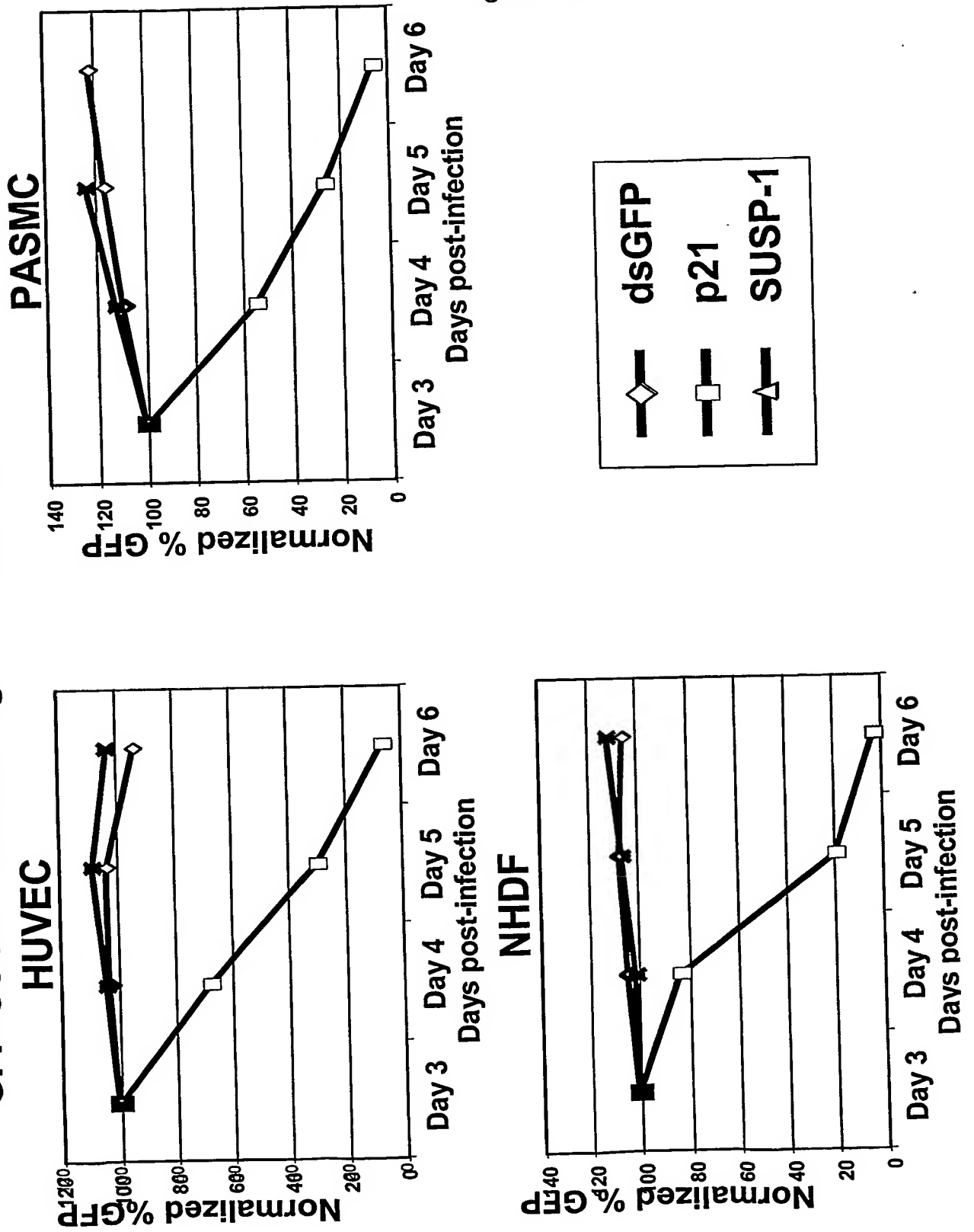


Figure 12

Expression Analysis of SUSP-1

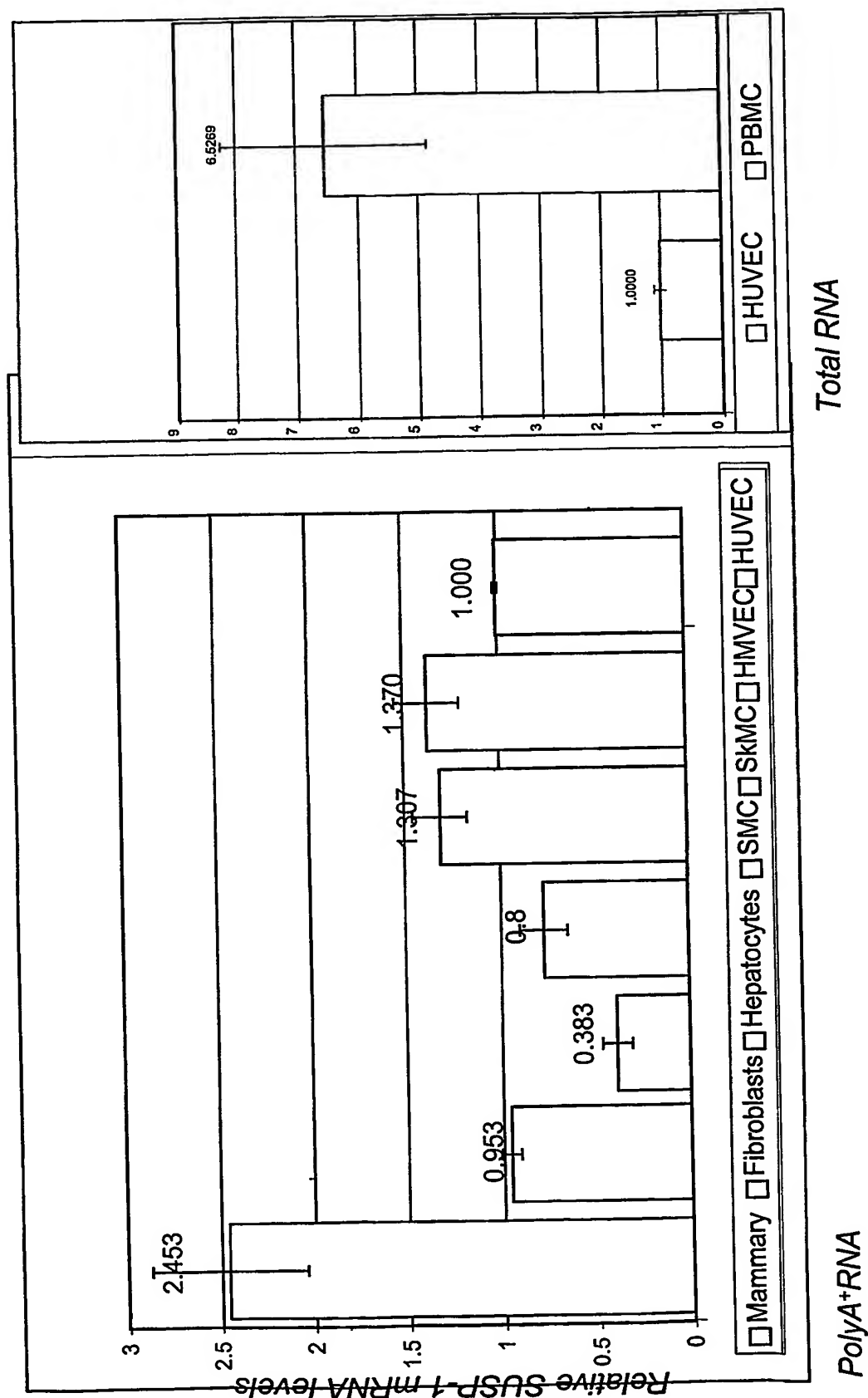


Figure 13

Figure 14

SUSP-1 siRNA inhibits SUSP-1 expression

Taqman

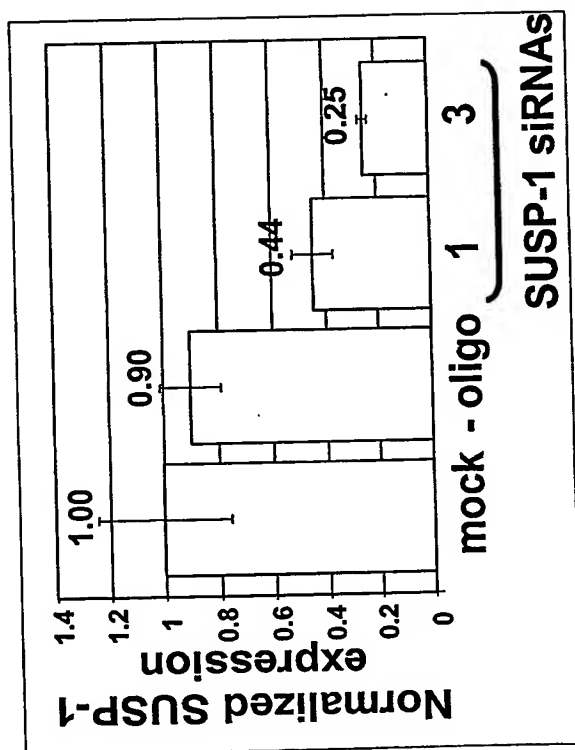


Figure 15

A new sequence determination for the ABC transporter gene, SEQ ID NO:2.

ABC transporter>

GGACGCGCCTGGTGCCTCCGGGGAGGGGCGCCACCGGGGGAGGAGGAGGAG
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CCTGACCTCAGGGGCCAGGGCACTGACAGGACAGGAGAGCCAAGTTCCTC
CACTTGGGCTGCCCGAAGAGGCCGCGACCCTGGAGGGCCCTGAGCCCACC
GCACCAGGGGGCCCCAGCACACCACCCCGGGGGCCCTAAAGCGACAGTCTCAGG
GGCCATCGCAAGTTCAGTTGCCTAGACAACAGGCCAGGGTCAGAGC
AACAATCCTTCCAGCCACCTGCCTCAACTGCTGCCCCAGGCACCAGCCCC
AGTCCCTACGCGGCAGCCAGCCAGGTGACATGCCGGTGCTCTCCAGGCC
CCGGCCCTGGCGGGGGAACACGCTGAAGCGCACGGCCGTGCTCCTGGCCC
TCGCGGCTATGGAGCCCACAAAGTCTACCCCTTGGTGCGCCAGTGCCCTG
GCCCCGGCCAGGGGTCTTCAGGCGCCCGCCGGGGAGCCACGCAGGAGGC
CTCCGGGGTTCGCGGCGGCCAAAGCTGGCATGAACCGGGTATTCCTGCAGC
GGCTCCTGTGGCTCCTGCGGCTGCTGTTCCCCGGGTCTGTGCCGGGAG
ACGGGGCTGTGGCCCTGCACCTCGGCCGCTTGGTGAGCCGACCTTCCT
GTCGGTGTATGTGGCCCGCCTGGACGGAAGGCTGGCCCGCTGCATCGTCC
GCAAGGACCCGCGGGCTTTTGGCTGGCAGCTGCTGCAGTGGCTCCTCATC
GCCCTCCCTGCTACCTTCGTCAACAGTGCCATCCGTTACCTGGAGGGCCA
ACTGGCCCTGTGCTTCCGAGCCGTCTGGTGCCACGCCTACCGCCTCT
ACTTCTCCAGCAGACCTACTACCGGTGACGAACATGGACGGGCGGCTT
CGCAACCCCTGACCAGTCTCTGACGGAGGACGTGGTGGCCCTTTCGGCCTC
TGTGGCCCCACCTCTACTCCAACCTGACCAAGCCACTCCTGGACGTGGCTG
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GCTGCGGGCCTTCTCGCCCAAGTTCGGGGAGCTGGTGGCAGAGGAGGCGC
GGCGGAAGGGGGAGCTGCGCTACATGCACTCGCGTGTGGTGGCCAACTCG
GAGGAGATCGCCTTCTATGGGGGCCATGAGGTGGAGCTGGCCCTGCTACA
GCGCTCCTACCAGACCTGGCCTCGCAGATCAACCTCATCCTTCTGGAAC
GCCTGTGGTATGTTATGCTGGAGCAGTTCCTCATGAAGTATGTGTGGAGC
GCCTCGGGCCTGCTCATGGTGGCTGTCCCCATCATCACTGCCACTGGCTA
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AGGTATTTGAAGATGTTTCAGCGCTGTCACTTCAAGAGGCCAGGGAGCTA
GAGGACGCTCAGGCGGGGTCTGGGACCATAGGCCGGTCTGGTGTCCGTGT
GGAGGGCCCCCTGAAGATCCGAGGCCAGGTGGTGGATGTGGAACAGGGGA
TCATCTGCGAGAACATCCCCATCGTCACGCCCTCAGGAGAGGTGGTGGTG
GCCAGCCTCAACATCAGGGTGGAGGAAGGCATGCATCTGCTCATCACAGG
CCCCAATGGCTGCGGCAAGAGCTCCCTGTTCCGGATCCTGGGTGGGCTCT
GGCCACGTACGGTGGTGTGCTCTACAAGCCCCACCCAGCGCATGTTT
TACATCCCGCAGAGGCCCTACATGTCTGTGGGCTCCCTGCGTGACCAGGT
GATCTACCCGACTCAGTGGAGGACATGCAAAGGAAGGGCTACTCGGAGC
AGGACCTGGAAGCCATCCTGGACGTCTGTCACCTGCACCACATCCTGCAG
CGGGAGGGAGGTTGGGAGGCTATGTGTGACTGGAAGGACGTCTGTGCGG
TGGCGAGAAGCAGAGAATCGGCATGGCCCGCATGTTCTACCACAGGCCCA
AGTACGCCCTCCTGGATGAATGCACCAGCGCCGTGAGCATCGACGTGGAA
GGCAAGATCTTCCAGGCGGCCAAGGACGCGGGCATTGCCCTGCTCTCCAT
CACCACCGGCCCTCCCTGTGGAAATACCACACACACTTGCTACAGTTG
ATGGGGAGGGCGGCTGGAAAGTTCGAGAAGCTGGACTCAGCTGCCCGCCTG
AGCCTGACGGAGGAGAAGCAGCGGCTGGAGCAGCAGCTGGCGGGCATTC
CAAGATGCAGCGCGCCTCCAGGAGCTCTGCCAGATCCTGGGCGAGGCCG

TGGCCCCAGCGCATGTGCCGGCACCTAGCCCGCAAGGCCCTGGTGGCCTC
CAGGGTGCCTCCACCTGACACAACCGTCCCCGGCCCCCTGCCCCGCCCCCA
AGCTCGGATCACATGAAGGAGACAGCAGCACCCACCCATGCACGCACCCC
GCCCCCTGCATGCCTGGCCCCCTCCTCCTAGAAAACCCCTTCCCGCCCTCGGG
AAAGTAGATGTGGAGGGTGGCGCCCTGCGTAACCCTCGCCCTGTCCCTCC
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CCCCCTGGCACTGCAGGTGGCCTCCCTCCAGAGACTCGAGTCCCCATGATT
CCCTCCTCGTCAGTCTCTCAAAGACCCCATGGTCCATCCCCTGAGGGTGG
TCAGCCAAGGCTCCCGTTCCGTGGGATGCCATAAAAGCCGCCAGTGGGA
CCCACAGTCACACAGAGCGCCTCACCTGCATCCTCTCCCCACAAGAGCC
CCAAAGATCCCACGGGAGAGGGGAGAGGGACGCACAGCACTGCCTGCCAA
GCGAGAATGCAGGCCCCGCCCTCGGGCCCTCACCACCTCTTTCTACAG
CCTAATTTATTGGATTCCCTATTTCGTAGCCATCTCCGTGGCCAATGTGAC
TACCGTGCCAGCAGCGGGGGCGGCCAGCCTCTGAGTCCCGTGGGGCCCC
GGCTCCCACCGGTGCCAAACCCAGCCCCCTGCGGCCGTACCCCGCCAGCC
TACACTGCCAGCCGCCACCGGGGCACACGGGCCTCTGCTTGCCAGCCAGG
AGTGC GGACACCATGTTCCAGCTCAGTGCCAAAGAGGGGTACCAGGGG
GAGCTGTCTGCGGAGCCAGCGCTGCCCGAGAGAGACCCACCGCCACCG
TGTGCCTTTCCCGGGCCCTCAGCCCTCGGGCCGGGCACCACCCCCAGTCC
CCCCAGTAAAAGCCTCCACTGGCAAAAAAAAAAAAAAAAAAAAAA

Figure 15 cont.

Figure 16

A new sequence determination, SEQ ID NO:127 for HSPA5

SEQ ID NO:127

HSP5>

ATGGAGGAGGACAAGAAGGAGGACGTGGGCACGGTGGTCTGGCATCGACCT
GGGGACCACCTACTCCTGCGTCGGCGTGTTCAAGAACGGCCGCTGGAGA
TCATCGCCAAACGATCAGGGCAACCGCATCACGCCGTCTATGTGCGCTTC
ACTCCTGAAGGGGAACGTCTGATTGGCGATGCCGCCAAGAACCAGCTCAC
CTCCAACCCCGAGAACACGGTCTTTGACGCCAAGCGGCTCATCGGCCGCA
CGTGGAATGACCCGTCTGTGCAGCAGGACATCAAGTTCTTGCCGTTCAAG
GTGGTTGAAAAGAAAACATAACCATAACATTCAAGTTGATATTGGAGGTGG
GCAAAACAAAGACATTTGCTCCTGAAAGAAATTTCTGCCATGGTTCTCACTA
AAATGAAAAGAAACCGCTGAGGCTTATTTGGGAAAGAAGGTTACCCATGCA
GTTGTTACTGTACCAGCCTATTTTAATGATGCCCAACGCCAAGCAACCAA
AGACGCTGGAACATTGTCTGGCCTAAATGTTATGAGGATCATCAACGAGC
CTACGGCAGCTGCTATTGCTTATGGCCTGGATAAGAGGGAGGGGGAGAAG
AACATCCTGGTGTGTTGACCTGGGTGGCGGAACCTTCGATGTGTCTCTTCT
CACCATTGACAATGGTGTCTTCGAAGTTGTGGCCACTAATGGAGATACTC
ATCTGGGTGGAGAAGACTTTGACCAGCGTGTCATGGAACACTTCATCAAA
CTGTACAAAAAGAACGGGCAAAGATGTCAGGAAAGACAATAGAGCTGT
GCAGAAACTCCGGCGCGAGGTAGAAAAGGCCAAACGGGGCCCTGTCTTCTC
AGCATCAAGCAAGAATTGAAATTGAGTCCTTCTATGAAGGAGAAGACTTT
TCTGAGACCCCTGACTCGGGCCAAATTTGAAGAGCTCAACATGGATCTGTT
CCGGTCTACTATGAAGCCCGTCCAGAAAGTGTGGAAGATTCTGATTTGA
AGAAGTCTGATATTGATGAAATTGTTCTTGTGTTGGTGGCTCGACTCGAATT
CCAAAGATTGAGCAACTGGTTAAAGAGTTCTTCAATGGCAAGGAACCATC
CCGTGGCATAAACCCAGATGAAGCTGTAGCGTATGGTGCTGCTGTCCAGG
CTGGTGTGCTCTCTGGTGATCAAGATACAGGTGACCTGGTACTGCTTGAT
GTATGTCCCCTTACACTTGGTATTGAACTGTGGGAGGTGTCATGACCAA
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CTACAGCTTCTGATAATCAACCAACTGTTACAATCAAGGTCTATGAAGGT
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TGGAATTCTCCTGCTCCTCGTGGGGTCCCACAGATTGAAGTCACCTTTG
AGATAGATGTGAATGGTATTCTTCGAGTGACAGCTGAAGACAAGGGTACA
GGGAACAAAATAAGATCACAATCACCATGACCAGAATCGCCTGACACC
TGAAGAAATCGAAAGGATGGTTAATGATGCTGAGAAGTTTGCTGAGGAAG
ACAAAAGCTCAAGGAGCGCATTGATACTAGAAATGAGTTGGAAAGCTAT
GCCTATTCTCTAAAGAATCAGATTGGAGATAAAGAAAAGCTGGGAGGTAA
ACTTTCCTCTGAAGATAAGGAGACCATGGAAAAAGCTGTAGAAGAAAAGA
TTGAATGGCTGGAAAGCCACCAAGATGCTGACATTGAAGACTTCAAAGCT
AAGAAGAAGGAACCTGGAAGAAATTGTTCAACCAATTATCAGCAAACCTCTA
TGGAAGTGCAGGCCCTCCCCCAACTGGTGAAGAGGATACAGCAGAACTCC
ACCACCACCACCACCAC

Figure 17

Protein disulfide isomerase, SEQ ID NO:165.

SEQ ID NO:165

Novel protein disulfide isomerase

Novel (disulfide disomerase-like)

CGGACCAACACAGTATTGAGTCAACTGTGACCTTAAGATCAGAGGAACGTCAATACTGCCACAAGGCCACCTTTCCA
GAACTCGTGGGCAGGTAACTATGCTTTGGATGTGCTTTCTTTCACCAAATCACTCAACTCAGGAGCCACAAATAG
TCCAGCAATTTTCATTTCCCTCAACGCTATTTTAGTCTCAAAGGAAACCATGTAAATTTTCATCAAGAGAAGGTCAAAG
GGGATATATCGCCACTGAAAATGTTTACACAGTGACCATGAGTTACACATTTACTTAGAGAACTTAACTTAATAAA
GAATCTGTAGAGTGTGTTGGCTTGGAACACACACACAAAGAAGATACCTCACGCTTAGTATGTTCTGCTTTCTGA
ACAGCCACCACTGGGAACCCAGTGGCCTCTGTGGGACTGAACTCCTAAACGCAGGGTGCGGGAGCTGGGCAGGAGAG
GTGACCTCCAACGTGTGTTCTAAAGTTCGTCTTTCGCTTGGCTCAGGACAAAGCGGTGTAACGAGTCAAAGTCTCTG
CCTCCACTGTGCTCACTGACTTTCTTCCCTCCTCGGAAAAGCAATAACGTGGGGTAGCCTCGT

Figure 18

Chromosome 1 protein

SEQ ID NO:210

Clone 30 -Novel (Chromosome 1)>

ATCTACATGAGGTCCTGTAGATTGAGCAACTTTGGCTATTTGGGTAGCTGATCCACTGCCAAGCTGGCTCCCAGCTA
CCACCTGTTACTTTGACAACTCTAGCTTCAGGGCTACCAGGACCATTTGCAAAACTTACACCCACAGAAAACTCAAA
GTCTCCAGAGGCATAAGCTCCAACCCCCAGAGAGCTCCACAGCATTCCTTCCTTCTAGTAGTACTTTTGGTTTCCA
GGAAAATCATCTCATGCTCGGGCCACAGTCACAGTCCTGACCAGCACCATAGAAATTTAGCCATTATTCTAGTTGT
ATGGAGTCATTCAAATACTAGTTCCGAAAGAAGTTTCAAAGGTCCAACGCCGAGCATCTTTTACCTTTGCTAATTT
TTCCATAAATTGAAAGCCTT

Figure 19

Chromosome 3 protein

SEQ ID NO:218

Clone 95 -Novel (Chromosome 3/ H41) >

GCGTCGCTCGGCGTTAGCCAAGGCCCGGGCGGCCACCCTCCGGGGGCACTAGGTCTGGGGCCGCGAGTGCCCAGCA
CAGAGCAGCGTTTATCGGGACGAAGATGAATGGAAAGAATTGGAGCAAAAAGAGGTTGATTACAGCGGCCTCAGGGG
TTCAGGCAATGCAAATAAGCAGTGAAAAGGAAGAAGACGATAATGAAAAG

Figure 20

Chromosome 17

SEQ ID NO:227

Clone 147 - Novel (Chromosome 17) >

CTGCTTCTCTTCTAGGATAGTTTCCCTCTAGAAATCCATGTTGCTCCTTCTCTCATTAAATGATCAGATATTTATGT
GCCTCCTTAGCTAAGAGGGCCTTCCTTATCTACCCCTAACTAAGAGAATCCCCATATCACTCTTA¹CCTTTTATCCTGA
TTTATTTTTCATATAAACTTGCCACATTACTGGGCATTATCTATCATTTAGTAATGTGTATATTGCTTATTGACAGT
CTTCCCTACTATAATATGAGCTCCATGAGGCAGAGACTTTGTTTTGTTCACTGCTGAATCCCAGCACCTACAACAA
GCCTACTCACTAAACATTTGTTGAATTAATCTTCAGGATACATCAAATGTAAATATCCTATCATATATTTATTGAT
GTGATGCATAGGAAAATGTCTGGAAGGGTACATACCAAATGTTAATTATTTATTTAACCTGGTGGGAGGTGGTTTT
TCTTTCCTTTTCTTTTCTTTTGTGAGACAGAGTTTCGCTCTCGTTGCCAGGCTGGAGTGGGAATGGCAAG

Figure 21**Chromosome 8 protein****SEQ ID NO:232**

Novel (chromosome 8) >

GCTTGCAAAGGAGAGGCTGTGACTACCAAGTCGTGTCAACAACCTGAATGGCTGAAATACCCAACTTGCCCATGCAA
ATGGGCTTGGGTCTCTCCTGGCAGCCGCTTTGAAGGCTCTAGACTTATCTGTGAACTCCTTTTTTGAGAGGGTCTT
TCCAAC TAGTGGTTTATTCTTTGACTCTCCTCATACTTTTGGCCAGAGAGTGAGAGTGAGAAGGGAGGGCTAATG
CCTGAGCTCCTGCCCTTCTATGCAGTGAGGGTCAAGATCCTCAGCTAGTGTGTTGAGGGAAGTGGTGTAACCTGGGT
CTCTCATTTTCTACCATCCAAGTTGCC

Figure 22

Chromosome 9 protein

SEQ ID NO:248

Clone 49 -Novel (Chromosome 9) >

CTGCAGGAGACCACAGGCAGGTGCCCACCTAAGAGGGACAGCCACAGAAACCCTCTAACCTCAGCACTGCACTCCAC
CACGACCACCCACGCAGGCCCTCAGCACCAGCACTCCACCACGAACACCCACACAGGCTGAGGCTGGAGCCAGAAG
CTGCCAGAACATGGGACCACAGGGCCAGGCACCACACAAACATGGCGACGGACACAGCCATCCAACCCGACTCGGAC
CTCCGCCAGGCCCCAGCGCACAAACCATCTGGGATCCCCAGGAAAAGAGCTGCGTGCGGCCAG

Figure 23

1/226 protein

SEQ ID NO:274

Clone 1/226 - Novel (Clone1/226) >

GCCGAGCCGGACTGGTCAGGATGATCACGGACGTGCAGCTCGCCATCTTCGCCAACATGCTGGGCGTGTGCTCTTC
TTGCTTGTCGTTCTCTATCACTACGTGGCCGTCAACAATCCCAAGAAGCAGGAATGAAAGTGGCGCTTTCTCCGCCC
CAGGGTTCAGGACATAGTCTGAGGCAAGATGGAGGGTATGAGGGGCCTTCACACTTCACTTCATCCCTTCTACCCA
TCACAACATACAAAGCAACTACACCTGGATTTTCCAAACAACCTTTTATTTCTCAGAGTCTTCCTTAATCCTATGG
AACAAAGAAGCTGCCACTGAATAGGGCCCAGTATAGGGGCTTGCTTTTCTACTCCCTCCCCCAATATAAAAATATAG
ACTTTTAAAAAAAAAAAAAAAAAAAAA

Figure 24

A new sequence determination for FLJ10688

SEQ ID NO:285

Novel (FLJ10688) >

CACCCAGCACCTTACCAGAAGCTCCACAACCACAGCGTCTGCCCCCAGAAGCTGCCAGCACATCTCTGCCTCAGAAG
CCACACTTGAAGTTAGCACGCGTTCAGAGTCAAAATGGCATAGTACTGTTCATGGAGTGTCTGCTGGAGGTGGATCGAAG
CTGTGCCACTGTTGATAGCTACCATCTCTATGCTTACCATGAGGAACCCAGTGCCACTGTGCCCTCACAATGGAAAA
AGATTGGGGAAGTCAAGGCACTTCCCTTGCCCATGGCATGTACTCTCACCAGTTTGTATCTGGTAGCAAATACTAC
TTTG

Figure 25

A new sequence determination for KIAA1583

SEQ ID NO:307

Clone 89 -Novel (KIAA1583)>

ACTGCAGGTGGCAGCCACGGGCGCGCCGCTCGGCCTCATCTGACGCCTCTGCAGCGGGTTCCGCAGGCCTGCAGGGC
GGGGAGGCCCGGGACTGGCCGTCAGCGCTGAACGGCCCAGCCTGCCCAGGGCCCAGCTGCTGGAAGACCCGCAGCTCGT
CCCCGGCGGGCTCCTAATCACCAGCAGCTCCTGTTTCTCAAAACGCAGACATCCGCCCCCTCTTGGGGTCAGGCCCTTC
CACCTGTCAGGCGAGCCGCCCCAGCCCACTCCCGACTGGCGCTATGCCTCGATCACCGCTCTTGCTCCCAAGTGGAC
CGCAGGGGAGACGCTCTCTTACGGGGACCCTGGGGGCGCTCACTCTCTGAAGGGCCTGGAAGCTAGATTCCAGAGGC
GTGGGCCACCTCTCCCTGGGTTTTGGGGAGCCCCCTCCGAGGGTGTTTCATTTCTGAGCTCTGTGTCATCTTAGGCT
CTGAGGGT

Figure 26

A new sequence determination for KIAA1814

SEQ ID NO:317

Clone 75 -Novel (KIAA1814) >

CTGGACGGCCTGGCTGGGCTGAAGGGCGAGGACAGCCGCGAGCAAGGAGGCAGGGGAGGGCGGCCTACCGCTGTGCGG
GCCCACGGACAAGACCCCACTGCTGAGCGGCAAGGCCGCCAAGGCCCGGGACCGCGAGGTGGA[~]CTCAAGAATGGCC
ACAACCTCTTCATCTCTGCGGCGGCCGTGCCTCCCGGAAGCCTCCTCAGCGGCCCGGCCTGGCCCCGGCGGCGTCCT
CCGCAGGCGGCGCGGCGTCCTCCGCCCAGACGCACCGGTCCTTCCTGGGCCCCCTTCCCGCCGGGACCGCAGTTCGCG
CTCGGCCCCATGTCCCTGCAGGCCAACCTCGGCTCCGTGGCCGGCTCCTCCGTGCTGCAGTCGCTGTTCACTCTGT
GCCGGCCGCGCAGGCCTGGTGACGTGTCGTCCGCTGCCACCAGACTGACCAACTCGCACGCCATGGGCAG

Figure 27

Chromosome 4 protein

SEQ ID NO:320

Novel (maps to chromosome 4)

Novel (Chromosome 4)>

GGAATAAAAGAGTGGAAATGGGGATTTCCAGGTGCTCCCCTGGTTCATCTAGGCACCAGAGAGCTGCACTAGCAGGT
CTATCATGAATCTCCTTGGAATGCTCATTTTTAGTCCTACTTGATGTGTCTGTTTCTGGAAATGCAGTATTTTAAAT
GTATCTCAACAAAATATTTTATGATTAGTAAGCTTATTCTTATATAAAGGACAATTTTTTTCCTTTTTCACAGGTTC
TAATAATTTTTTATTTAATAATTAGATCTATTAGATTTTATTCATAACTGTGGTAGTTGAAGTACCTTCTAAGCTGA
GTTTCAGATTTGAGAATAAACCTTGGGGTATCATTACAGAAAATTTGTCTCAATCTGCTTTGTATTTGAAAGATATG
AGATTCTTGAATTATATATCTTACAGACTAGTCCCCAAAAGAATACGTGTTTCCTTACCTTTAATTTCTCATGGTAG
TTAGTCTGTGAAT

Figure 28

A new sequence determination for peroxidasin/melanoma antigen related protein

SEQ ID NO:323

Novel peroxidasin-like/ melanoma antigen>

CGACCTGGCCAGCCACCGCGGCCTGCTGCGGCAGGGCATCGTGACCGGTCCGGGAAGCCGCTGCTCCCCCTTCGCCA
CCGGGCCGCCCACGGAGTGTCATGCGGGACGAGAACGAGAGCCCCATCCCCCTGCTTCCTGGCCGGGGACCACCGCGCC
AACGAGCAGCTGGGCCTGACCAGCATGCACACGCTGTGGTTCCGCGAGCACAACCGCATTGCCACGGAGCTGCTCAA
GCTGAACCCGCACTGGGACGGCGACACCATCTACTATGAGACCAGGAAGATCGTGGGTGCGGAGATCCAGCACATCA
CCTACCAGCACTGGCTCCCGAAGATCCTGGGGGAGGTGGGCATGAGGACGCTGGGAGAGTACCACGGCTACGACCCC
GGCATCAATGCTGGCATCTTCAACGCCTTCGCCACCGCGGCCTTCAGGTTTGGCCACACGCTTGTCAACCCACTGCT
TTACCGGCTGGACGAGAACTTCAGCCCATTGCACAAGATCACCTCCCCCTTCACAAAGCTTTCTTCTCTCCCTTCC
GGATTGTGAATGAGGGCGGCATCGATCCGCTTCTCAGGGGGCTGTTTCGGGGTGGCGGGGAAAATGCGTGTGCCCTCG
CAGCTGCTGAACACGGAGCTCACGGAGCGGCTGTTCTCCATGGCACACACGGTGGCTCTGGACCTGGCGGCCATCAA
CATCCAGCGGGGCCGGGACCACGGGATCCCACCCTACCACGACTACAGGGTCTACTGCAATCTATCGGCGGCACACA
CGTTCGAGGACCTGAAAAATGAGATTAAAAACCCTGAGATCCGG

Figure 29

WD40/SOCS box protein

SEQ ID NO:329

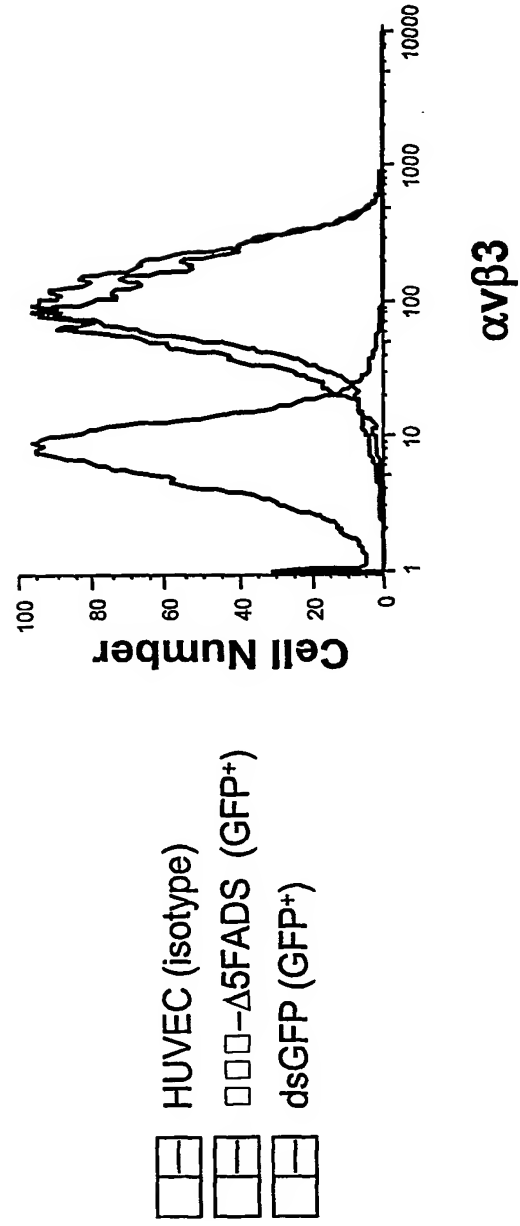
Novel WD40/SOCS box protein>

CGGCTCTGTTGCCGTGCAAGTGGAATCATCTTACCTCTAAGACATGACTTTCACATGCCAGGGGAGAGAAAGATCCA
TGACTAGTACACTGGCAATCTGGTTTTGCTACATTCTATTCACAATCCCAAAGAAATGCTATTTCATGCAAGACCA
GATGTTTGGCCCATTATTCCAGCAACTCCCTTTGACAGGACGATTTACCCTGCTACCAAAGAAGCACAAAGATGTGGT
GTTGCTTAAAAAGTCCTGTATGTGAGGAACTCTTTCATTTTCTTGGGGATTGGCAGTGCTAGGACTTGGTAAGTTG
TTAGGAAACTTCGAAGGGCTTTCCGGCATAAGTGCTTCAGTGAGGACAGGACCCTAGGAGCTGTCCAGAACTGGACG
TGGCCATCTCTTGTCCCTGTGGCAATGACTCCACCATGTGGAAAAAATGTGCAGCAAAGCCCATTGGTCATAGGAGC
AAATGCAATGGGAGTTTTTCAGTTCCAGGGCCCAGATCCTGAGGAGTCTGTCATCTGCCACCGTGGCAAGGTACAAGC
CCCCG

GFP-Δ5FADS Antisense Screening Hit Downregulates Surface αvβ3 Levels



• GFP- Δ5FADS screening hit: 300 bp antisense



GFP-Δ5FADS Antisense Screening Hit does not Affect Cell Proliferation

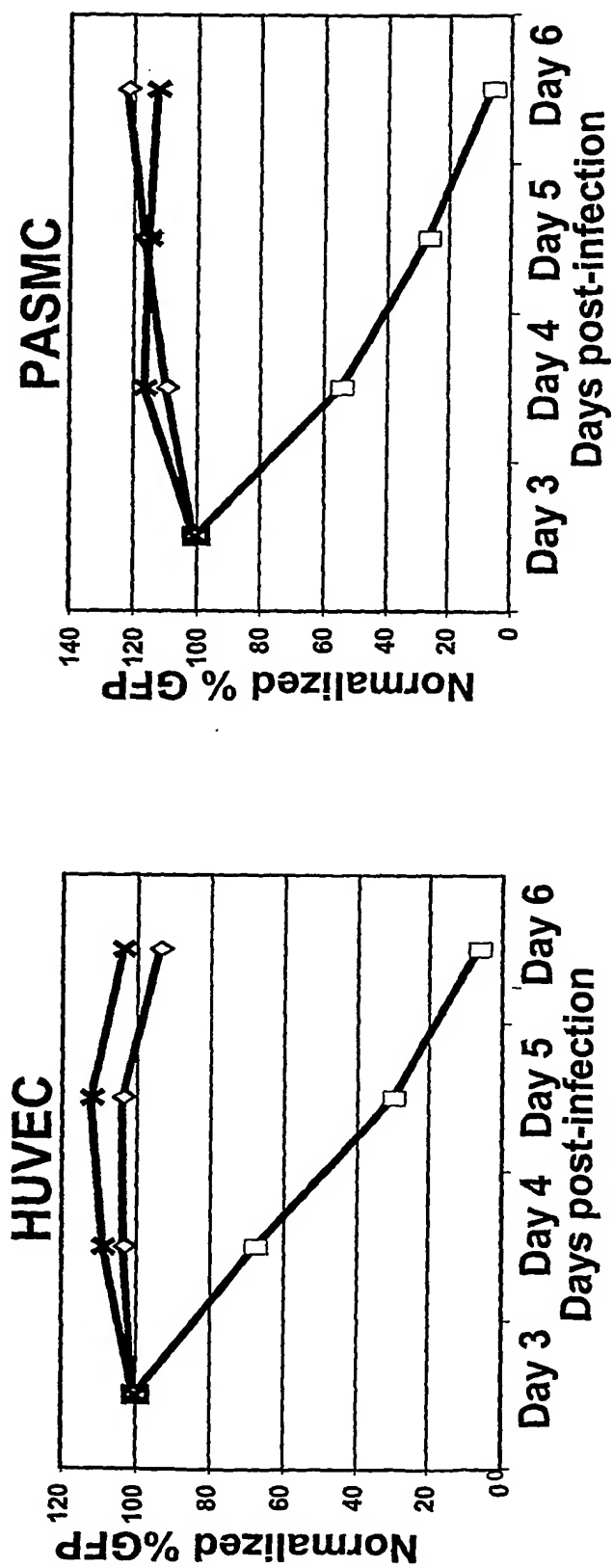


Figure 31

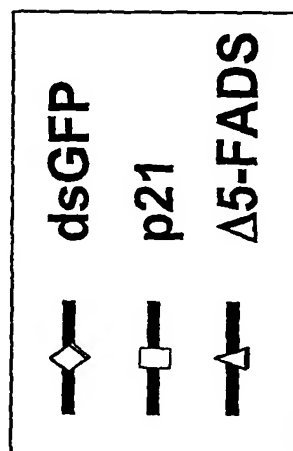
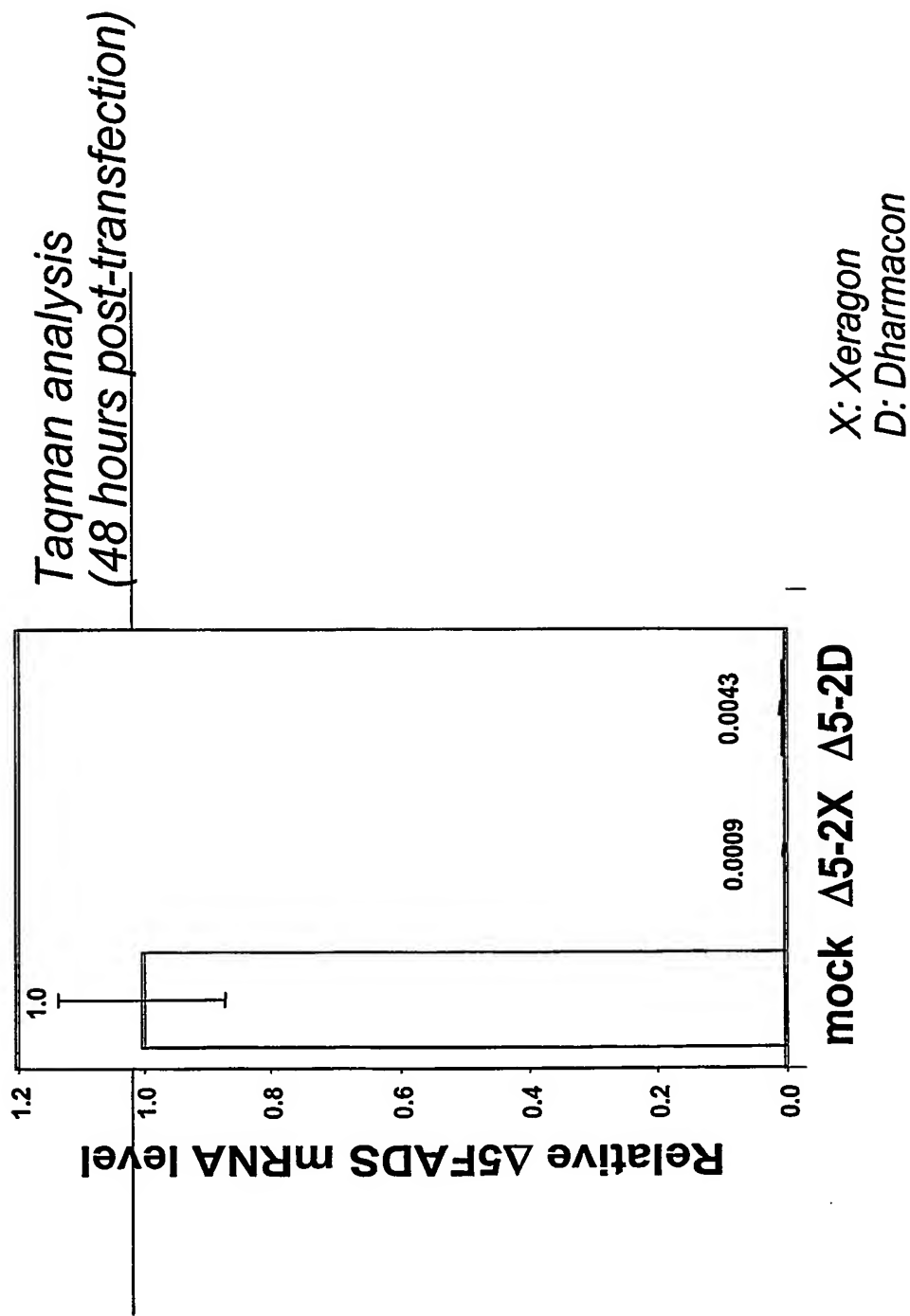


Figure 32

siRNA($\Delta 5-2$) Blocks $\Delta 5$ FADS Expression in HUVEC



$\Delta 5$ FADS RNAi Inhibits Haptotaxis

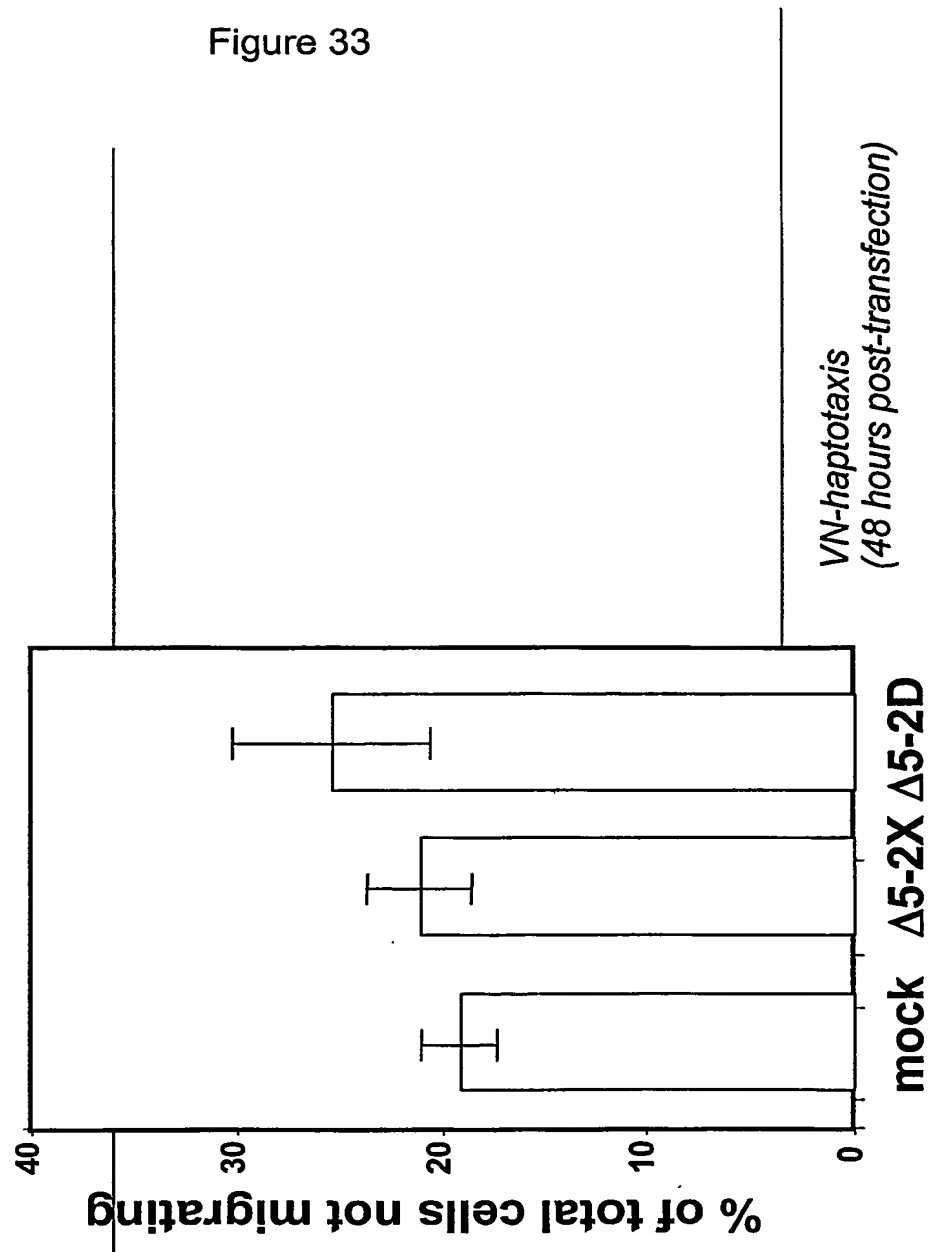


Figure 34

Δ5-FADS RNAi Vector Reduces SDF-1 Induced Chemotaxis in Jurkat Cells

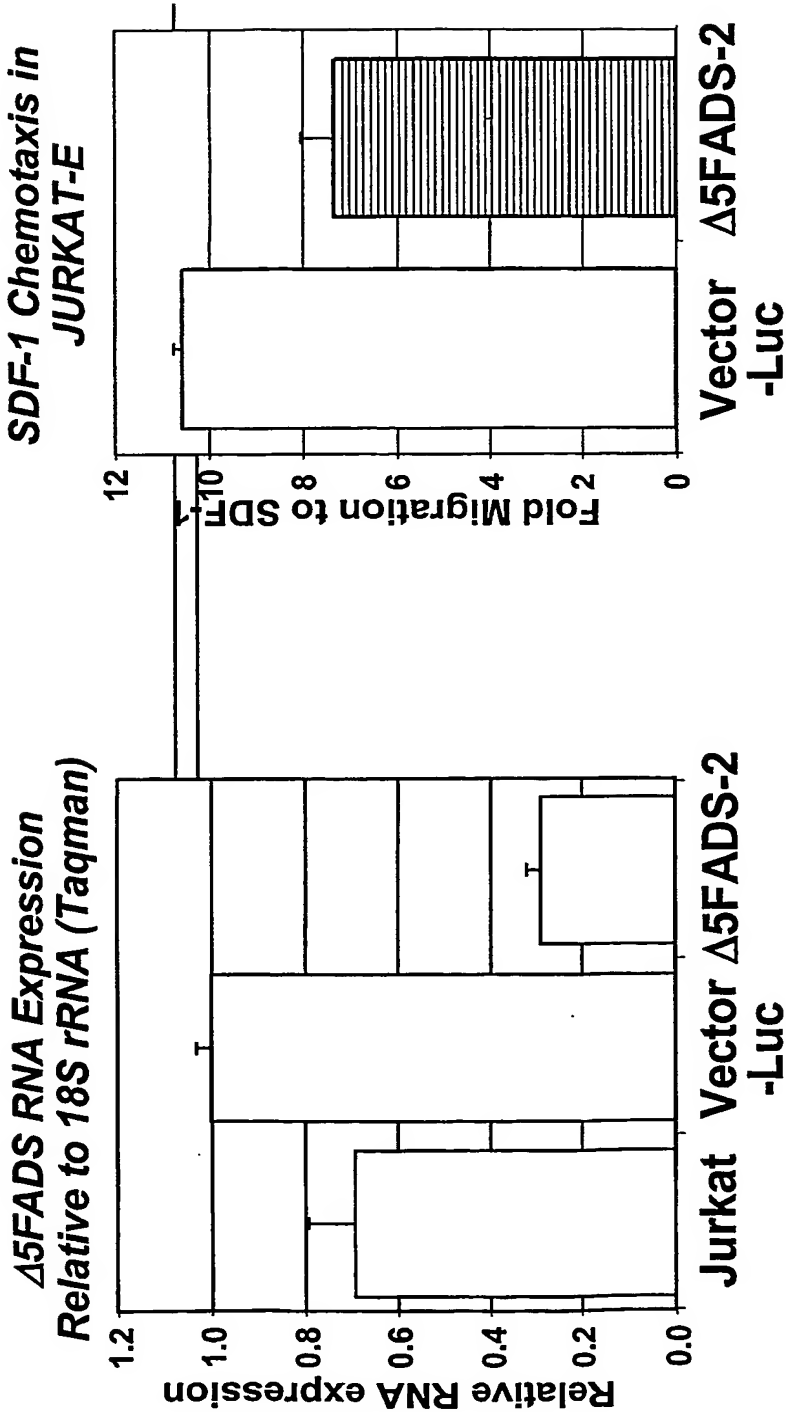
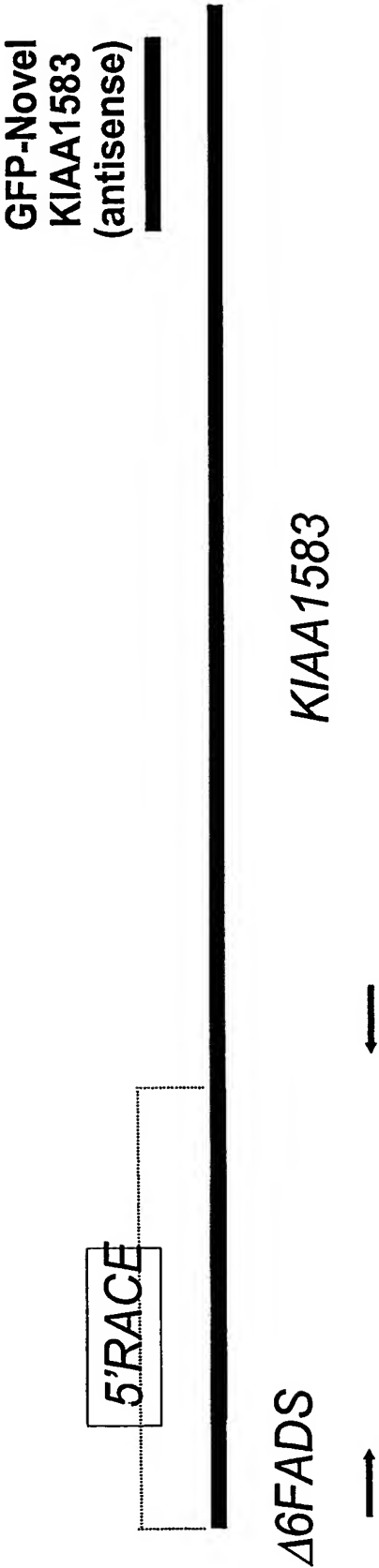


Figure 35

Δ 6FADS is a Functional Screening Hit

- 5' RACE analysis indicates that the Δ 6FADS transcript is spliced with the Novel (KIAA1583) transcript.
- Δ 6FADS and KIAA1583 sequences are both located on Chromosome 11q12



GFP-Novel
KIAA1583
(antisense)

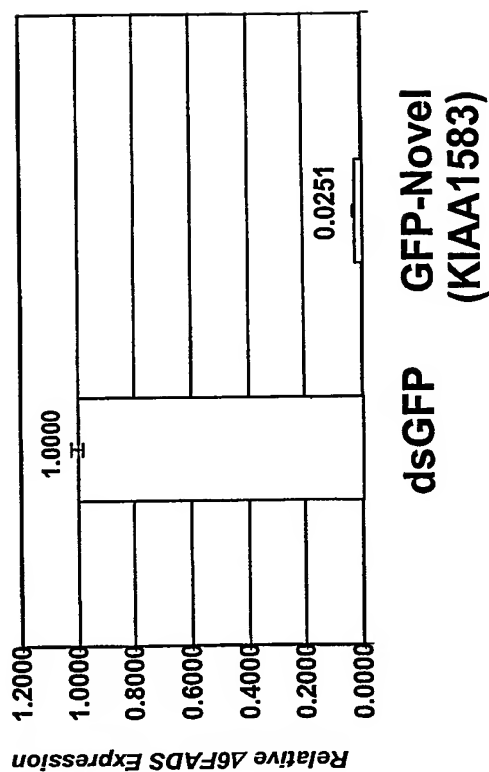
Splicing independently
validated by RT-PCR
and sequence analysis

Figure 36

Δ 6FADS is a Functional Screening Hit

- HUVECs expressing the GFP- Novel (KIAA1583) screening hit have strongly reduced levels of Δ 6FADS mRNA.

Taqman analysis of Δ 6FADS mRNA levels



$\Delta 6$ FADS RNAi Reduces $\alpha v\beta 3$ Surface Expression

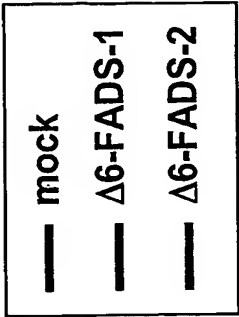
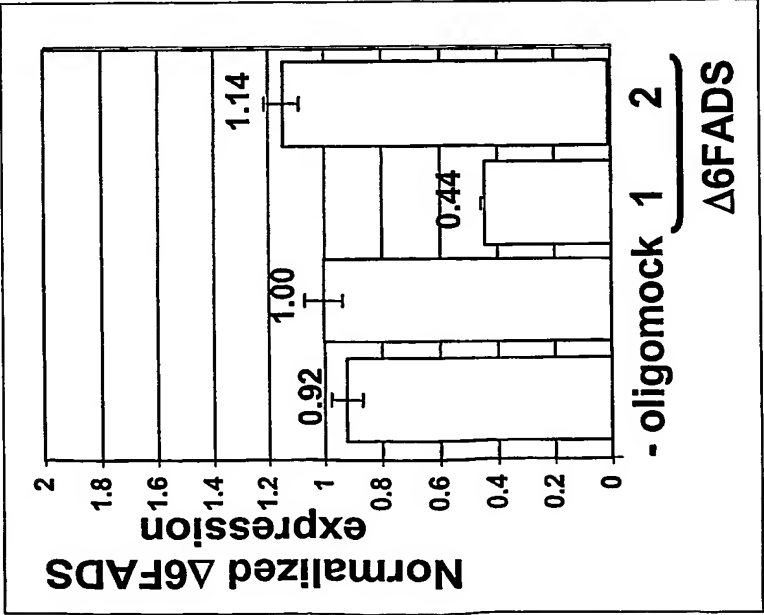
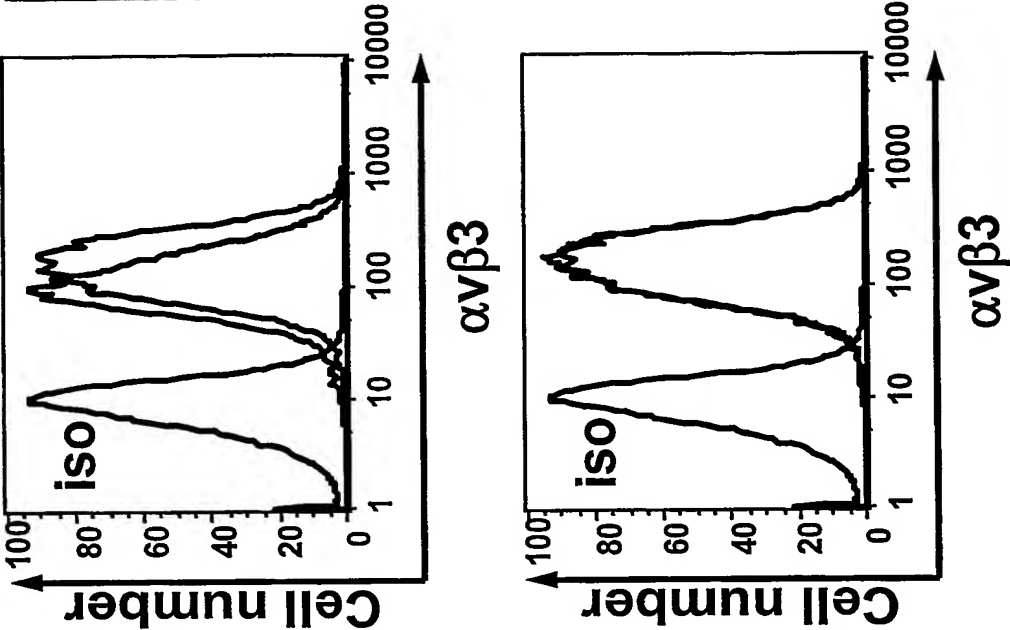


Figure 37



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